

Claim 1

Claim 1 recites:

1. A method for electronically displaying a test item to a respondent at a first workstation, the method comprising the steps of:
 - storing test content in a memory system, the test content including at least a question portion and a response portion;
 - capturing at least a portion of the test content in a test item image;
 - overlaying a response control over the test item image, the test item image and response control together defining a test item; and
 - presenting the test item to the respondent at the first workstation for electronically generating a response from the test item.

The Specification explains the term "test item image":

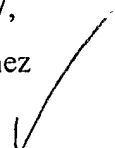
An image such as a test item image is data representing visual information. The image is defined by data assignments to data points or pixels. The data assignments may include information such as color or brightness. The image may be stored in a raster format such as a TIFF, PNG, JPEG, GIF, or BMP file. A vector format may also be used, such as DXF or DWG, where the format is made up of commands to draw lines, arcs, etc. to create the desired visual image. A raster format is preferred.

Application, page 5, lines 20-26.

The Specification further explains that "Capturing test content in a test item image tends to compensate for variations in the user interface. As a result, the technique provides more uniform test item presentation across a variety of hardware and software system configurations." Application, page 6, lines 2-6. As shown in Figs. 1 and 3, the captured image includes a question portion of a test item.

Martinez

Martinez discloses a Figural Response Testing System and Method that presents a question stem, an image background, and objects or "tools." The question stem is a "textual statement." Col 4, line 24. The image background 40 and foreground objects or tools are presented in bitmap or vector graphics. See Col. 4, lines 1-2, col. 5, lines 6-7, and Fig. 2 and Fig. 6 (step 88). However, there is no teaching or suggestion in Martinez to present the textual question stem in a bitmap or vector graphic format.



Regarding claim 1, the Examiner stated:

Martinez discloses storing test content in a memory system, the test content (i.e. figures including at least a question portion (i.e. a question stem) and a response portion (i.e. response area). . . . Martinez discloses capturing at least a portion of the test content in a test item image. See Col. 3: 51-56. . . .

Applicants respectfully traverse this rejection.

Martinez does not teach or suggest each element required by the claims. For example, Martinez at least does not teach or suggest capturing test content, including a question portion and a response portion, in a test item image, where the test item image and response control together define a test item, as required by claim 1. As shown in Fig. 6, Martinez teaches that displaying the question step and displaying the item response background are separate steps 87, 88. Martinez only teaches presenting the image background as a bitmap image, and does not teach capturing the question portion as well as the background in an image. See Figs. 1 and 6. Therefore, Martinez does not teach the steps of claim 1 relating to a question portion of test content. Accordingly, claim 1 is patentable over Martinez at least for this reason.

Claims 2-10 depend from claim 1 and are allowable at least because they depend from an allowable independent claim.

Accordingly, it is believed that the claims fully comply with § 102(b), and withdrawal of this rejection is respectfully requested.

Rejection of Claim 4 under 35 U.S.C § 103(a)

The Examiner rejected claim 4 under 35 U.S.C § 103(a) as being unpatentable over U.S. Patent No. 5,211,564 to Martinez et al. in view of U.S. Patent No. 6,042,384 to Loiacono. Applicants respectfully traverse this rejection. Claim 4 is allowable at least because it depends from an allowable independent claim, as described above.

Rejection of Claims 11-21 under 35 U.S.C § 103(a)

The Examiner rejected claims 11-21 under 35 U.S.C § 103(a) as being unpatentable over U.S. Patent No. 5,211,564 to Martinez et al. Applicants respectfully traverse these rejections.

Claims 11 and 14

Claim 11 recites:

11. A method for electronically displaying a test item to a respondent in a consistent manner on a first workstation display having a first display resolution and at least one other workstation display having a display resolution different than the first display resolution, the method comprising the steps of:

displaying a question portion in an image format, wherein the same amount of scrolling is required to view the question portion on the first workstation display device and the other workstation display device, despite the different display resolutions; and

displaying a response control overlaid on the question portion.

Claim 14 recites "providing an image including at least one question portion and one response portion" and displaying the test item on first and second workstations having different display resolutions, wherein the same amount of scrolling is required to view the test item on the first display and the second display.

The Examiner stated:

[T]he aforementioned limitations are matters of design choice as one could modify the display resolution in various ways to eliminate scrolling, reduce scrolling, increase scrolling, to make the test items look bigger or smaller, etc. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to incorporate the aforementioned limitations into the method and system of Martinez to facilitate viewing a test item for a given user.

Applicants respectfully traverse this rejection.

In electronic testing, one does not necessarily have control over the display resolution for each student. Thus, providing uniform scrolling through controlled screen resolution may be impossible or impractical.

In contrast to Martinez, Claim 11 requires presenting the question portion in an image format, as shown for example in Figs. 1, 3, and 8, to provide uniform scrolling without regard to screen resolution. Claim 14 requires presenting both the question portion and the response portion in an image to provide uniform scrolling on first and second displays having different resolutions.

Martinez makes no mention of uniform scrolling. There is no teaching or suggestion in Martinez to present a question portion in image format to provide uniform scrolling, as recited in claims 11 and 14. Claims 11, and 14 are patentable over Martinez at least for this reason. ✓

Claims 15-21 depend from claim 14 and are allowable at least because they depend from an allowable independent claim.

Claim 12

Claim 12 recites "displaying a first test item on a first display having a first resolution . . . and displaying the first test item on a second display having a second resolution . . . wherein the same number of pixels is used to display the first test item on the first display and on the second display."

There is no suggestion in Martinez to display a test item on displays having different properties with the same number of pixels is used to display the item on each display. Martinez suggests that the question portion is a "textual statement." The number of pixels used in the "textual statement" will vary for example depending on the display resolution, the font, and the size of the image. Martinez does not teach or suggest displaying a test item with the same number of pixels on a first and second display having different resolutions, as required by claim 12. Claim 12 is patentable over Martinez at least for this reason. ✓

Claims 13 depends from claim 12 and is allowable at least because its depends from an allowable independent claim.

Accordingly, it is believed that the claims fully comply with § 103(a), and withdrawal of this rejection is respectfully requested.

Summary

In summary, each of claims 1-21 are in condition for allowance and a notice of allowance is respectfully requested.

Respectfully submitted,

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